AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF PAGES
	1	6

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
AM0006	**20-Nov-2000**		

6. ISSUED BY — DACA87 — CODE

U.S. Army Engineering and Support Center
Attention CEHNC-CT-E /W. Hampton
P.O. Box 1600
Huntsville, AL 35807-4301

7. ADMINISTERED BY *(If other than Item 6)* — CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

CODE | FACILITY CODE

(√)

X — 9A. AMENDMENT OF SOLICITATION NO. DACA87-00-R-0001

9B. DATED *(SEE ITEM 11)11- JUL-2000*

10A. MODIFICATION OF CONTRACT/ORDER NO.

10B. DATED *(SEE ITEM 13)*

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [X] is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning __1__ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

√	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority) FAR 52.243-3 Changes*

E. IMPORTANT: Contractor [ ] is not, [ ] is required to sign this document and return ___ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Request for Proposal (RFP) DACA87-00-R-0001, Construction of Tactical and Tactical Support Facilities for the X-Band Radar at Eareckson Station, Shemya, AK for the National Missile Defense (NMD) Program.

SEE CONTINUATION SHEET FOR DETAILED CHANGES

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ *(Signature of person authorized to sign)*		_____ *(Signature of Contracting Officer*	

NSN 7540-01-152-8070 — 30-105 — **STANDARD FORM 30** (REV. 10-83)
PREVIOUS EDITION UNUSABLE

A. Amendment 0006 is issued to incorporate additional answers to questions received through 18 September 2000.

B. As mentioned in letter dated 28 September, based on recent programmatic developments affected by presidential decision considerations, proposal evaluation will resume upon receipt of programmatic guidance. Notification of any significant developments will be given to all offerors. Offerors must acknowledge receipt of this amendment. Offeror are reminded to submit the Standard Form 1442, Solicitation, Offer, and Award acknowledging all amendments in Item 18. This amendment must be acknowledged two weeks after receipt of this amendment.

C. All other terms and conditions of this solicitation remain unchanged

QUESTIONS AND ANSWERS

A: Questions relating to Diesel Generators.

Section 16263 – **Diesel Generator Set Stationary 100-2500 kW, with Auxiliaries**

120. Para 1.2.1. Power Plant Load Model 1: No Transient Recovery time is stated for load additions.

Answer: Will be provided as design is completed. This will be changed by future amendment.

121. Para 1.3.11.d: Air intake temperature not over 90 degrees F. This is in conflict with Para 1.2.1, which states 104 degrees F.

Answer: Para 1.3.11.d states outside intake air temperature of 90 degrees F. Para 1.2.1 states maximum indoor temperature of 104 degrees F.

122. Para 2.2 – Engine: The engine is to operate on JP-8 fuel; to determine any applicable de-rating for using this fuel, the specific API Gravity of fuel to be used at this site is required. JP-8 has a wide variability of gravity; to accurately determine the engine output, this number is required. Also, to determine the potential exhaust emissions for these engines, the sulfur content of the fuel is required.

Answer: See MIL-DTL-83133E – Turbine Fuels, Aviation, Kerosene Types, NATO F-34 (JP-8), NATO F-35, and JP-8+100".

123. Para 2.3.1.2 – Auxiliary Fuel Pump: An auxiliary fuel pump is not required by the engines proposed.

Answer: That is correct.

124. Para 2. 3.4 – Fuel Day tank: No mention regarding the fuel tanks being UL listed, double wall.

Answer: We do not know of a code requirement for these temporary storage tanks to be double walled or UL listed.

125. Para 2.5.3 – Expansion Tank: The cooling system for these engines requires they be rated only 7-10 psi. Given this requirement, the cooling system expansion tank will not be rated for 125 psi, nor will it be ASME rated or stamped.

Answer: This is acceptable.

126. Para 2.5.5 – Jacketwater Heat Recovery: Neither the specifications or drawings indicated the required heat transfer or the secondary side circulation rate, therefore, some adjustments in this system may be necessary.

Answer: Size for what the engine system is capable of providing.

127. Para 2.10- Emissions: This paragraph states seven generators sets are to run at an average of 63% of rated load; Para 1.2.1 – Engine-Generator Parameter Schedule, indicates six generators sets will be run in either schedule, with different load factors than as stated above. These conflicts must be resolved to confirm anticipated emissions compliance. Additionally, the emissions system is an SCR system as allowed. This process utilizes a urea-based chemical injection system. It requires a storage tank of approximately 5,000 gallons, and it must be kept above a minimum temperature of 32 degrees F, which may require installation inside the generator building, or a heating system, if installed outside the building. All this equipment takes up significant floor space that is not allowed in the design drawing at this time. The drawings and P & ID do not depict a catalytic converter; this oversight needs to be resolved to preclude major conflicts within the powerhouse. In addition, without fuel analysis, which was not provided in the specifications, it is impossible to guarantee the effectiveness of the emissions reduction system. Paragraph indicates the exhaust emissions shall not exceed 250 tons total. It does not state if this is per engine, or the entire system. Without information regarding the fuel, stated above, and without knowing how many engines are expected to run (what load level, how many hours per year) it is impossible to estimate an emissions reduction system to meet specifications.

Answer: Will be provided as design is completed. This will be changed by future amendment.

128. Para 2.27.2- Factory Tests: The generator factory may not able to connect six generators of this size together for the tests as specified. Also they may not be able to integrate a load device with equivalent power factor as stated. As an option, will it be permissible to test each unit individually with an 0.8 PF load.

Answer: If factory cannot connect six generators, connect as many as possible and provide computer simulation as specified.

129. Para 3.5.7.2 – Multiple Combinations: Paragraph describes parallel operation of all different combinations of generator sets in the system "at service load." There are load stated in the parameter schedule; for estimating required loadbank capacity, what is to be used?

Answer: Will be provided as design is completed. This will be changed by future amendment.

Section 16264 – **Diesel-Generator Set, Stationary 15-300 kW, Standby Applications**

130. Para 2.3.1.2 – Auxiliary Fuel Pump: An auxiliary fuel pump is not required to maintain prime on the fuel system of this engine.

Answer: Paragraph 2.3.1.2 states that an auxiliary fuel pump is to be provided"…if either required by the installation or indicated on the drawings". If auxiliary pump is not shown on the drawings, the need for the pump becomes the Contractor's decision based upon the characteristics of the pump provided with the generator in combination with the piping involved with the actual installation. The Contractor should consult the diesel generator manufacturer when making this decision. If the Contractor does not require an auxiliary pump to provide a complete and operational system, then the specification, as written, does not require a change.

131. Para 2.3.4 – Daytank; since the return fuel cooler is not required on this engine, and there is not annunciation elsewhere for high fuel temperature, no sensing device is required.

Answer: Paragraph 2.3.4 states that the fuel oil return line cooler should be provided if recommended by the manufacturer and assembler. The same paragraph also requires a temperature-sensing device to be installed in the fuel line going to the engine. This device should be installed regardless of whether or a fuel oil cooler is provided. Typically, annunciator panels contain auxiliary contacts that can be used for this function. If the annunciator panel does not have this capability, a simple remote reading device should be provided.

132. Para 2.5.3 – Expansion Tank: The expansion tank is an integral part of the engine radiator, which operates at 7-10 psi, therefore, it is not necessary for the tank to be rated for 125 psi.

Answer: Paragraph 2.5.3 of the specification applies to external expansion tanks that are usually not provided as an integral part of the radiator. The first sentence states "If recommended by the manufacturer…". Clearly, the manufacturer that is raising this question is not requiring the addition of an external expansion tank. However, another manufacturer may require an external expansion tank. Therefore, the specification should not be changed regarding external expansion tanks.

133. Para 2.17.2 – Engine Generator Set Metering and Status Indication: The unit mounted control panel cannot be replicated as a remote panel, due to programming features of the digital panel. As an alternate, a computer output data port can be supplied to allow monitoring of the engine metering and status via an Owner's computer terminal.

Answer: This is acceptable as long as a remote stop switch is provided IAW NFPA.

134. Drawing E-0108 – Depicts the 150 kW standby generator with a 400-amp frame, 175-amp trip circuit breaker. This is obviously wrong; it should be a 600 AF, 600 AT, since full load amperage is 502 @ 208 volts.

Answer: Generator circuit breaker should be 600AF, 600AT, Load circuit breaker will be 400AF/175AT. Final design will be modified accordingly.

Section 16311 – **Medium Voltage Switchgear**

135. Para 2.4 – Metal-Clad Switchgear: This paragraph indicates the enclosure will be outdoor (NEMA 3R) type. This is in conflict with drawing A-200, which depicts the switchgear inside the building. The switchgear proposed has NEMA 1, indoor enclosures.

Answer: Switchgear rated for NEMA I IS CORRECT.

B. Questions relating to the Seismic Isolation System

Horizontal Fuse/Positioners & Vertical Fuse/Positioners

136. Are the fuses passive or replaceable

Answer: Fuse positioning system will likely be a reusable actively triggered system utilizing electronic controls.

Contractor shall provide fuse positioning system as specified in final design.

137. What is the expected/design release force

Answer: Seismic fuses shall trigger at ground motion accelerations equal to or greater than those that would occur with a two year return period.

138. What is the expected/design reset force

Answer: The design reset force will be as specified in final design.

Vertical Spring

139. RFP calls for coil spring which may not work. Have hydro-pneumatic spring been considered as a more workable option.

Answer: Fluid springs have been considered

140. What are the known mounting requirements

Answer: Mounting requirements are as specified in final design.

141. Need to define the electrical interface

Answer: Electrical interface not required for vertical springs.

Friction pendulums

Friction Pendulum Bearing

The following items need to be clarified, to insure the proper bearings are provided:

142. Materials: The material of the main concave spherical surface shall be ASTM Designation A240, Type 316 stainless steel. The material of the concave plate and housing plate shall be ASTM A536 and shall have a minimum yield strength of 40 ksi, minimum ultimate tensile strength of 60 ksi, and minimum elongation of 12%. The material of the articulating of the articulating slider shall be ASTM Designation A240, Type 316. Is this acceptable?

Answer: Contractor shall provide FPS bearings as specified in final design.

143. Tolerances: The external bearing dimensions shall be within $\pm$ 0.5. of the values show in the bearing drawings. The internal bearing dimensions shall be per IPS standard manufacturing process. The location of holes or threaded holes will be located to within $\pm$ 0.02 in. of the values shown in the bearing Drawings. The average vertical load of the bearing test shall be within $\pm$ 10% of the target vertical load. The average lateral displacement of the bearing test shall be within $\pm$5 of the target displacement. Is this acceptable?

Answer: Contractor shall provide FPS bearings as specified in final design.